

Harmain M. Harmain, Ph.D.

Professor of Computer Science & Software Engineering
College of Information Technology, University of Tripoli, Tripoli, Libya
Tel: +218-92-5741551 | Email: h.harmain@uot.edu.ly

EDUCATION

- **Ph.D. in Computer Science**, University of Sheffield, UK (2000)
Thesis: Building OO Conceptual Models using NLP Techniques
- **M.Sc. in Expert Systems Engineering**, University of Sheffield, UK (1995)
Dissertation: Automatic Analysis of English Program Specifications
- **B.Sc. in Computer Science**, University of Sebha, Libya (1990)

AWARDS AND CERTIFICATES

- Best Paper award at the 11th IEEE International Conference on Automated Software Engineering, Grenoble, France, 2000
- Several leadership and academic certificates

ACADEMIC EXPERIENCE

- Professor, College of Information Technology (SWE Department), University of Tripoli, Libya, 2014 – Present
- Associate Professor, Department of Computer Science, University of Sebha, 2013 – 2014
- Associate Professor and Chairman of Software Engineering Department, College of Information Technology, UAE University, Al Ain, UAE, 2008 – 2011
- Assistant Professor, College of Information Technology, UAE University, 2001 – 2008
- Lecturer, Dept of Computer Science, University of Sebha, 2000 – 2001
- Postgraduate student, University of Sheffield, 1993 – 2000
- Teaching Assistant, University of Sebha, 1991 – 1993

LEADERSHIP EXPERIENCE

- **Chairman**, Board of Directors, Economic & Social Development Fund, Libya, 2013 – 2017
- **DPM**, Libyan Transitional Government, e-Government Program, 2011– 2012
- **Project Lead**, Local Council Administration and Legitimacy (LOCAL) – Baladiyati Program, Libya, 2014 – 2015
- **Chairman**, Software Engineering Department, UAE University, 2008-2011
- **IT Project Manager**, UNEP, West Asia Environmental Data Gateway
- **IT Project Manager**, Abu Dhabi Environmental Agency Gateway
- **Technical Lead**, Open-source development initiative, IT College, UAE University
- **Technical Lead**, Several Web Development Projects

RESEARCH AND DEVELOPMENT SUMMARY

- Main areas of research interests include AI applications, Machine Learning, eLearning, Arabic Language Technology, Information Extraction, Web-based applications
- Principal Investigator (PI) and Co-PI on several research grants since 2001
- Project Manager for industrial projects with the United Nations Environment Program

- Project Manager for UAE Marriage Fund Project
- Member of program committees of many international conferences
- Reviewer for many international conferences and refereed journals

CURRENT WORK

- Conducting research projects in the area of Data Science and Machine Learning
- Supervising student research projects in topics such as autism detection, early detection of breast cancer, blockchain technology, and certificate authentication

RESEARCH GRANTS

- Design and Implementation of an Arabic Part-of-Speech Tagger, 2003
- Arabic Web-Based Natural Language Interface to Databases, 2004
- Arabic Natural Language Processing for Information Retrieval, 2004
- Universal Talk (U Talk), Design and Implementation of Arabic Webpage Reader, 2005 (3-year grant)
- Learning Arabic with Mobile Devices, 2009

TEACHING AND PROFESSIONAL COMPETENCE

- **Teaching Philosophy:** My teaching is based on a very simple and intuitive philosophy; students should ultimately get to the point where they understand that learning is their own responsibility.
- **Curriculum Development:** During my academic carrier, I have participated in curriculum development at several universities:
 - **UAE University:** As a founding faculty member at the College of Information Technology, I have actively participated in the curriculum development from the inception stage through the course development and implementation to the ABET accreditation, 2001-2011
 - **Al Ain University:** Participated as a committee member in the development of the Software Engineering program
 - **Canadian University in Dubai:** Participated in the development of some computer science courses
 - **Tripoli University:** when I joined the College of IT at Tripoli University in 2014, the first cohort of students was just graduated. I participated in the College committee to assess the curriculum and chaired the committee of the Software Engineering program.
 - **Course Development:** I have developed and taught several courses at the UAEU and Tripoli University including: OO Programming in Java and C++, Introduction to Artificial Intelligence, Programming in Logic, Software Requirements Analysis, Software Engineering, IT Project Management, Web Development, Advanced Internet Programming (NodeJS), Database Systems, and Formal Methods.
- **Teaching Courses:** AI, Logic Programming, OO Programming, Advanced Internet Programming, Web Applications Development, Software Requirements, Formal Methods, Project Management.
- **Programming Languages:** Java, C++, JavaScript (NodeJS), Prolog, PHP, Python
- **Program Accreditation:** Participated in the ABET accreditation process of the IT Program at UAE University

PROFESSIONAL ACTIVITIES

- Member of the Association of Computing Machinery (ACM)
- Conference/Journal Reviewing:
 - Served on the Workshops sub-Committee for the International E-Learning Symposium, 2001 – 2002
 - Member of the Program Committee, NLDB'04 Conference, 2003 – 2004
 - Technical Committee, International Business Information Management Conference (IBIM'03)
 - Member of the Program Committee, IRMA'05 Conference.
 - Member of the Program Committee, NLDB'05 International Conference, 2004 – 2005
 - Member of the Organizing Committee of the 1st International Conference on Innovations on IT (IIT'04)
 - Member of the Program Committee of the ICICS'04 Conference.
 - Member of the Program Committee, NLDB'06 International Conference, 2005 – 2006
 - Member of the Program Committee of the ICICS'05 Conference.
 - Member of the Program Committee of the IIT'07, 2006 – 2007
 - Member of the Organizing Committee of the ALTA'07
 - Member of the Program Committee of the IIT'08, 2007 – 2008
 - Member of the Program Committee of the IIT'09, 2008 – 2009

PUBLICATIONS

Journals and Book Chapters

1. Abdusalam F. Nwesri and H. Harmain, "Analysis of Survey Data on Open Educational Resources". International Science and Technology Journal, April 2019, Volume 17(1), ISSN: 2519-9838.
2. Saeed Mohammed Sultan Al Khaili, Anuar Ahmad, Harmain Mohammed, Farag Sallabi, "Web Base GIS For Buildings Rent Prices In Abu Dhabi". Journal of Communication and Computer, June 2010, Volume 7, No.6, ISSN 1548-7709, USA.
3. Guerchi, D., Harmain M., Rabie T., and Mohamed E. "Speech Secrecy: An FFT-based Approach" Journal of Mathematics and Computer Science, Vol.3(2), April 2008.
4. M. Radaideh, S. Al Horani, and H.M. Harmain "E-School Management Systems." In Fong M.W. "E-Collaboration and Virtual Organization", IRM Press, 2004.
5. Harmain, HM. and R. Gaizauskas, "CM-Builder A Natural Language-Based Case Tools for Object-Oriented Analysis," Automated Software Engineering Journal, Vol. 10(2): 157-181, April 2003.

Refereed Conferences

6. A. Nwesri, S. Wu, H. Harmain. Detecting Misogyny in Arabic Tweets, ArMI 2021, sub track of HASOC @FIRE2021.
7. H. Harmain, A. Alshareif, ARABIC MORPHOLOGY ASSISTANT, 7th International Conference on Education and New Learning Technologies (EduLearn15), Barcelona, Spain, 6-8 July 2015.
8. H. Harmain, H. Kamel, D. Guerchi, A. Alshareif. UTalk: an Arabic Talking Browser. The Proceedings of the INTED2014 Conference, Valencia, Spain, 10-12 March 2014.
9. Y. Atif, K. Shuaib, H. Harmain, Z. Trabelsi. A CURRICULUM MODEL FOR POSTGRADUATE INFORMATION TECHNOLOGY PROGRAM THREADS, 6th International Technology, Education and Development Conference - INTED2012, Valencia, Spain, 5-7 March 2012.

10. B. Belkhouche; H. Harmain; H. Al Taha; L. Al Najjar. What is a modern Arabic dictionary? International Conference on Innovations in Information Technology, IIT 2011. Al-Ain, UAE. 25-27 April 2011:67-70.
11. Harmain, H. ALKHALEEL: A CORPUS-BASED LEARNING TOOL FOR ARABIC, EduLearn'10. Barcelona, Spain, 5-7 July 2010.
12. B. Belkhouche, H. Harmain, H. Al-Taha, L. Alnajjar, S. Tibi, Analysis of Primary School Arabic Language Textbooks. ACIT'10, Benghazi, Libya.
13. Harmain, H.M, H. El-Khatib, and H. Haddad, Towards and Arabic Language Interface to Relational Database. 9th IBIMA Conference on Information Management in Modern Organization. 4-7 Feb. 2008.
14. Hatem Haddad, H. M. Harmain, H. El- Khatib, Natural Language Processing for Information Retrieval, 7th UAE University Conference, April 2006, Al Ain, UAE.
15. Harmain H.M. and M. Shafique. Computer Assisted Language Learning for Arabic Morphology. The UAEU 6th Annual Conference, April 2005, Al Ain, UAE.
16. Guessoum A. and Harmain H.M. A Neural Network Based Arabic Morphological Analyzer. NEMLAR Conference on Arabic Language Resources and Tools, Sept. 2004, Cairo.
17. Harmain, H. M. and Jauhar Ali. Creating an Active Learning Tutorial in an Hour. The International Research Conference on Information Technology, IIT04, 2004, Dubai, UAE.
18. Harmain, H. M., El Khatib H., Saeed N., Aljohar B., Web Services-Based Hajj Information System. The International Conference on Information and Computer Science, ICICS'04, 2004, SA.
19. Harmain, H.M. and H. El-Khatib, "An Arabic Natural Language Interface to a Data Mining system. SETIT'04, Tunisia, March 2004.
20. Harmain, H.M., H. El-Khatib and A. Lakas. Arabic Text Mining. The Proceedings of the International Conference on Applied Computing, March 2004.
21. Harmain, H.M. "Arabic Part-of-Speech Tagging", The UAEU 5th Annual Conference, April 2004, Al Ain, UAE.
22. Lakas, A and H.M. Harmain, "Representing UML Class Diagrams in XML", The UAEU 5th Annual Conference, April 2004, Al Ain, UAE.
23. Harmain, H.M. and M. Radaideh, "Electronic Parent Teacher Association", The Proceedings of the IRMA'03 International Conference, May 2003, Philadelphia, USA.
24. Harmain, H.M., M. Radaideh, and S. Alhorani, "An Electronic School Administration System", The Proceedings of UAEU 4th Annual Conference, April 27- May 1, 2003, Al Ain, UAE.
25. Harmain, H.M. and Badr Aljohar, A Framework for an Arabic Information Extraction System, The Proceedings of the Second Arab Conference on IT, 13-15-11/2001, Jordan.
26. Harmain, H.M. and R. Gaizauskas, CM-Builder: An Automated OO CASE Tool, IEEE 15th International Conference on Automated Software Engineering, 11-15/9/2000, Grenoble, France.
27. Harmain, H.M., Alnuaimi, A., Aravassery, J., and Verma. Geo West Asia Data Portal: technical guide, Technical Report, CIT-UNEP-2007-2, April. 2007.
28. Harmain, H.M., Aravassery, J., and Verma. Contacts and Activities Management System, Technical Report, CIT-UNEP-2007-1, Feb. 2007.
29. Harmain, H.M., Aravassery, J., and Verma, A. Contacts and Activities Management System: Functional Specifications, Technical Report, CIT-UNEP-2006-1, April, 2006.
30. Harmain, H.M. Building Object-Oriented Conceptual Models Using Natural Language Processing Techniques, PhD Thesis, Uni. of Sheffield, UK, Feb. 2000.
31. Harmain, H.M. and R. Gaizauskas, Natural Language Processing and Object-Oriented Analysis, Technical Report, CS-98-8, Dept. of Computer Science, Uni. of Sheffield, UK, 1998.
32. Harmain, H.M. Automatic Analysis of English Program Specification, MSc Dissertation, Dept. of Computer Sc., Uni. of Sheffield, UK, 1994.